

COCHLIOMYIA TOWNSEND, 1915 (DIPTERA,
CALLIPHORIDAE): PROPOSED CONSERVATION BY THE
SUPPRESSION OF *CALLITROGA* BRAUER, 1883. Z.N.(S.)707

By the Secretary, International Commission on Zoological
Nomenclature

In a recent case concerning the generic name *Somomya* Bertoloni, 1861 (*Bull. zool. Nom.* vol. 40, pp. 106–109) Mr Adrian Pont (*British Museum (Natural History), London*) pointed out that the choice of species to be designated as type species of that nominal genus would make it a senior synonym of one of three other generic names — *Auchmeromyia* Brauer & Bergenstamm, 1891, *Hemilucilia* Brauer, 1895, or *Cochliomyia* Townsend, 1915. He has asked for a designation that will make *Somomya* a senior synonym of *Auchmeromyia* (and for the suppression of the former). While his proposals, if accepted, will remove that threat to the stability of *Cochliomyia*, the latter name is still threatened from a different direction by *Callitroga* Brauer, 1883. As the genus concerned — the screw-worm flies — is important in veterinary medicine, it is necessary for its name to be stabilised.

2. In 1952 Dr Sabrosky addressed a paper to the Commission asking a set of questions designed to clarify the status and the type species of *Callitroga*. His own position in relation to those questions was not stated; in August 1957, therefore, Mr Hemming, then Secretary to the Commission, asked him to frame his questions so as to show a definite position. In reply (October 1957) Dr Sabrosky said that the application could be 'withdrawn or left in abeyance' and that he might take the matter up again when the decisions of the London (1958) Congress on the status of names first published in synonymy had been promulgated. This, however, was not done and it is only the appearance of Mr Pont's application that has caused the case to be reopened.

3. *Callitroga* Brauer, 1883, *Denkschr. Akad. Wiss. Wien, math.-nat. Kl.* vol. 47, p. 74, was proposed in a specific synonymy as '[*Calliphora*] *anthropophaga* Lesbini, Weyenberg et Conil... [references]... = *Compsomyia* (Rond, 1875) *macellaria* F. conf. *Lucilia hominivorax* Coq. (*Lucilia* O.S., *Callitroga* Schin., *Musca* olim)...'. The Paris (1948) Congress (*Bull. zool. Nom.* vol. 4, pp. 350–351) had decided that a generic name first published as the generic component of a binomen in which the specific name is cited in synonymy, is not available. However, *Callitroga* is not clearly published in combination with any particular specific name, so that its status in the light of the Paris decision is obscure. Its subsequent status has varied according to successive decisions of the Commission concerning names first published in synonymy. Usage has fluctuated accordingly and it is now high time that the status of the name was settled once and for all.

4. The Copenhagen (1953) Congress (*Copenhagen Decisions zool. Nom.*, pp. 63–64) decided that names first published in synonymy without an independent indication, definition or description (or, in the case of a generic name, without names of included species associated with it) should not be available unless they had been generally accepted; in that event, such a name would be an objective synonym of the name with which it had originally been synonymised. This proposed provision failed to clarify the status of *Callitroga* because, although clearly synonymised with *Compsomyia*, no specific names were clearly cited in association with it. The London (1958) Congress decided that no name published in synonymy was available (Article 11d of the 1961 edition of the Code).

5. The Washington (1963) Congress modified Article 11d to allow a name first published in synonymy to be available if it had been adopted with its original author and date. *Callitroga* thereby became available as from Brauer, 1883, but usage did not follow this, as will shortly appear.

6. I am indebted to Dr Sabrosky for the following account of the history of usage: 'From Townsend's publication in 1915 (*J. Washington Acad. Sci.* vol. 5, p. 644) of *Cochliomyia* for the New World screwworms until the publication in 1948 of Hall's monograph on The Blowflies of North America (*Thomas Say Found.* No. 4, Purdue Univ., Lafayette, Ind.), *Cochliomyia* alone was used except for a few publications that continued to refer the New World screwworms to the Old World genus *Chrysomya* before *Cochliomyia* came to be widely accepted. This was especially true after Shannon adopted *Cochliomyia* in his synopses of the North American CALLIPHORIDAE (1923, *Insecutor Inscitiae Menstruus*, vol. 11, pp. 101–118; 1925, *Proc. entomol. Soc. Washington*, vol. 28, pp. 115–139). Townsend continued to use *Cochliomyia* in his massive 'Manual of Myiology' (1934–1935, Pts 1, 2; 1937, Pt. 5) (São Paulo); he considered *Callitroga* a synonym of the Old World *Compsomyia* (now a synonym of *Chrysomya*).

7. 'Hall adopted *Callitroga* in his 1948 monograph already mentioned and this usage then prevailed in North America until 1962, after the 1961 Code ruled that names first published in synonymy were not available, but the rest of the world, with few exceptions, continued to use *Cochliomyia*. The North American literature is extensive, of course, because of the importance of screwworms, particularly as pests of cattle and because of the attention devoted to research on control of the pests. The scientific name of the primary screwworm is extensively used in entomological literature, veterinary medicine, cattle growers' journals, state experimental station bulletins, extension service leaflets, etc.

8. 'After the Code was published in November 1961 I promptly notified our Agricultural Research Service of the change to *Cochliomyia*, and the first re-appearance of that name, to the best of my knowledge, appeared in the Cooperative Economic Insect Report (U.S. Dept. Agric.)

sometime in 1962. At the same time I changed usage in my service identifications and manuscript reviews. The way was thus prepared for an abrupt and complete change from *Callitroga* to *Cochliomyia* after D. G. Hall used the latter name in his contribution to Stone and others, 1965, *Catalog of the Diptera of America North of Mexico* (the publication of which had been delayed).

9. 'The Common Name Lists also switched to *Cochliomyia* from 1965 on. These lists are official lists maintained by the Entomological Society of America, with corresponding scientific names. They are used by editors and authors and are constantly scrutinised for accuracy. Obviously they promote and establish a great deal of usage. The first list was published in 1925 (*J. econ. Entomol.* vol. 18, pp. 521–545) and lists have been published ever since at six-year (later five-year) intervals. Generic and specific names for the screwworms have appeared in every list because of the importance of the species. *Cochliomyia* was used in 1925, 1931, 1937 and 1942, *Callitroga* in 1946, 1950, 1955 and 1960, and *Cochliomyia* again from 1965 to the current 1982 list.

10. 'As much of the research on screwworms is done by the staff of the Agricultural Research Service, papers published in *J. econ. Entomol.* quickly reflect the official usage of the service and of the Common Names Lists. From 1940 through 1947 *Cochliomyia* was used in 21 papers by 23 authors and *Callitroga* not at all. In 1948–1950 there were four papers by 10 authors (multiple authorship in team projects is common) using *Callitroga* and none using *Cochliomyia*. This usage prevailed from 1951 through 1961. In 1962, after my change of usage, there were seven papers by 12 authors using *Cochliomyia* and two by five authors using *Callitroga*. From 1963 on only *Cochliomyia* has been used. A similar picture emerges from the *J. med. Entomol.* The *Index of American Economic Entomology*, like the *Review of Applied Entomology*, is less reliable for usage because the editors gather all references under whatever generic name they adopt, with no indication of the name actually used in the work under reference.'

11. The two most cogent arguments for the suppression of *Callitroga* are, first, the now well-established use of *Cochliomyia*, documented above, and, secondly, the confusion over the type species of *Callitroga*. This has been treated differently by different authors. Some have treated the genus as having been established with *anthropophaga*, *macellaria* and *hominivorax* as the originally included species from which a type species could be designated. Hall, 1948, pp. 120, 122 designated *Musca macellaria* Fabricius, 1775, *Syst. Entomol.*, p. 776, as type species on that assumption. *Callitroga* thereby became a senior objective synonym of *Cochliomyia* Townsend, 1915, of which the same species is type species by original designation. Townsend rejected *Callitroga* as invalid and unavailable. Brauer took the view that *macellaria* was the type species by monotypy; he took it as the only originally included species with *anthropophaga* and *hominivorax* as synonyms. Brauer &

Bergenstamm, 1893, p. 179 also apparently took *macellaria* as the type species, although their citations have been ruled out as type-species designations by Opinion 98, 1928. Yet in the same work, p. 194, note 85, they treated *Callitroga* as a synonym of *Compsomyia*; they treated '*anthropophaga* Lesbini' (?non Blanchard, 1872, *C.r. Acad. Sci. Paris*, vol. 75, pp. 1133-1134) as type species and as congeneric with the type species of *Compsomyia* Rondani, 1875, *Ann. Mus. civ. Stor. nat. Genova*, vol. 7, p. 425, namely *Musca dux* Eschscholtz, 1822, *Entomographica*, vol. 1 (1), p. 114, by later designation by Coquillett, 1910, *Proc. U.S. nat. Mus.* no. 1719, p. 526. As the suppression of the generic name is here advocated, the question of the type species of the genus becomes academic.

12. In view of the above evidence, the International Commission on Zoological Nomenclature is hereby asked:

- (1) to use its plenary powers to suppress the generic name *Callitroga* Brauer, 1883, for the purposes of the Law of Priority but not for those of the Law of Homonymy;
- (2) to place the generic name *Cochliomyia* Townsend, 1915 (gender: feminine), type species, by original designation, *Musca macellaria* Fabricius, 1775, on the Official List of Generic Names in Zoology;
- (3) to place the specific name *macellaria* Fabricius, 1775, as published in the binomen *Musca macellaria* (specific name of type species of *Cochliomyia* Townsend, 1915) on the Official List of Specific Names in Zoology;
- (4) to place the generic name *Callitroga* Brauer, 1883, as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Generic Names in Zoology.